

FIGURE 1A

PRIOR ART

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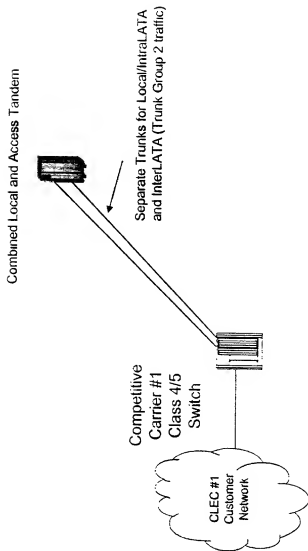
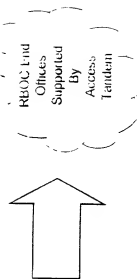


FIGURE 1B

Prior Art

Ameritech LATA 357 Tandem Trunk Group 1 Requirements

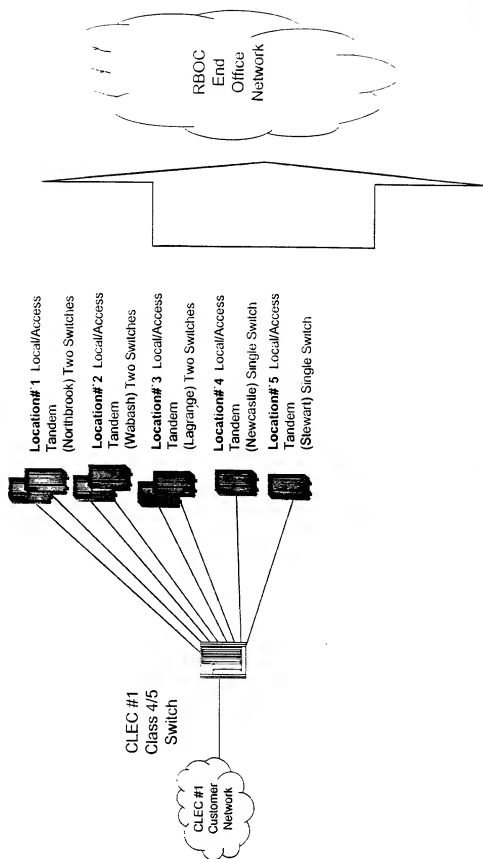
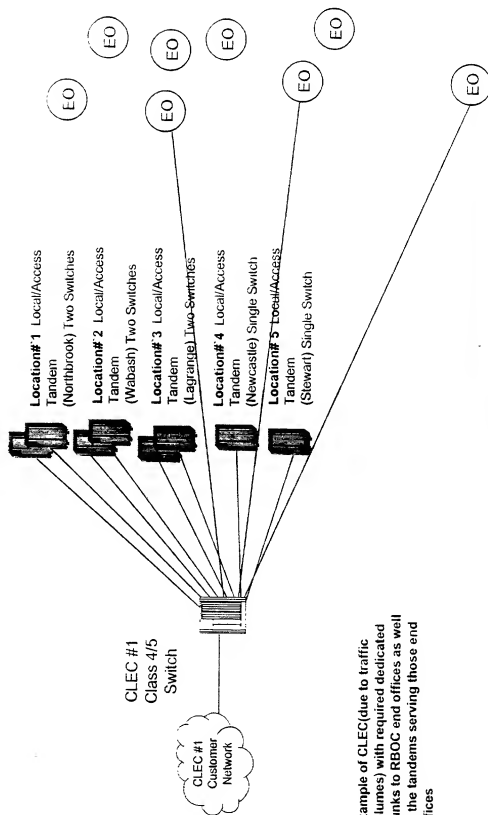


FIGURE 2

Prior Art

Amnitech LATA 357 Tandem Trunk Group 1 Requirements



Example of CLEC (due to traffic volumes) with required dedicated trunks to REOC end offices as well as the tandems serving those end offices

FIGURE 3

Prior Art

Ameritech LATA 357 Tandem Trunk Group 2 Requirements

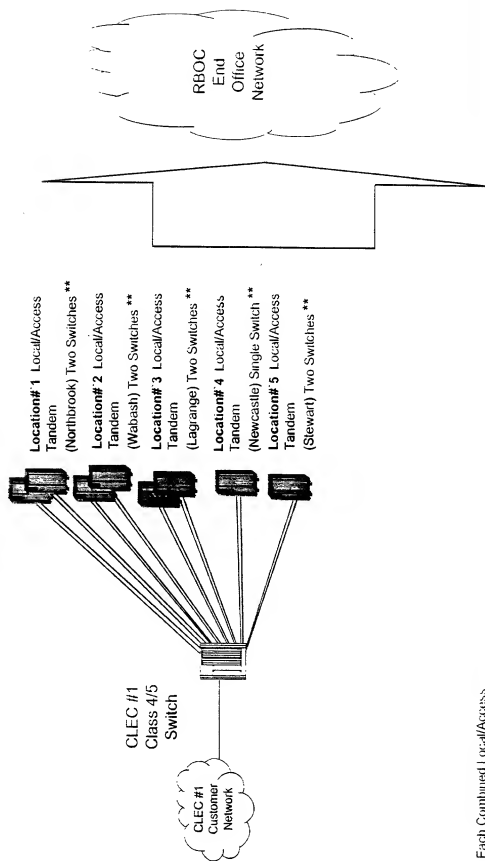


FIGURE 4

Prior Act

**** Each Combined Local/Access Tandem requires two trunk types Local/IntraLATA and InterLATA**

Ameritech LATA 357 Tandem Trunk Group 3 Requirements

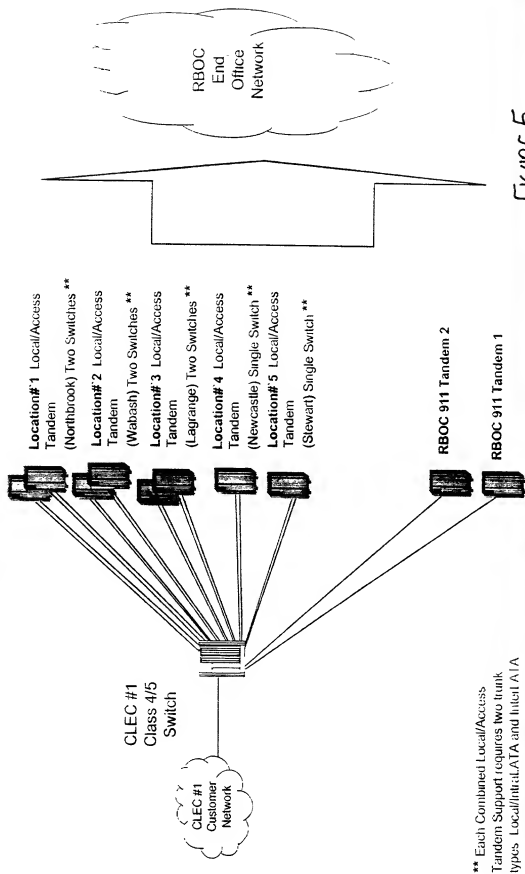
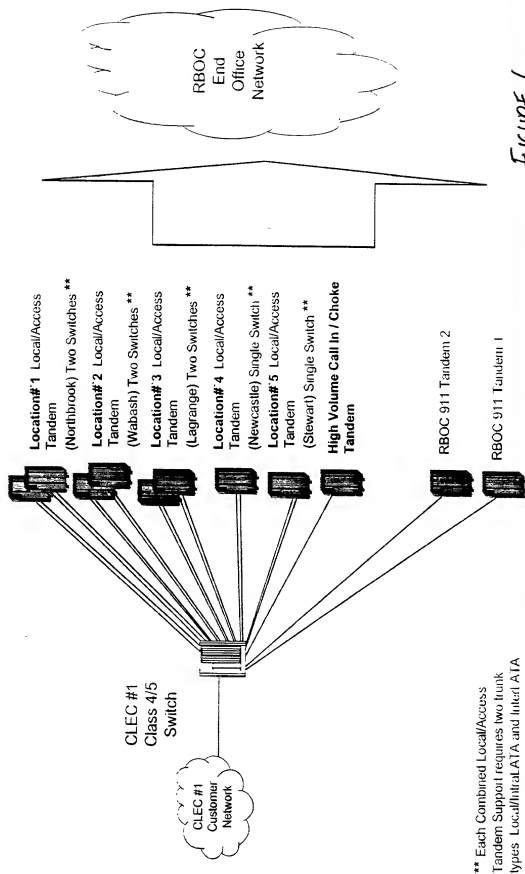


FIGURE 5

Prior Art

Ameritech LATA 357 Tandem Trunk Group 4 Requirements

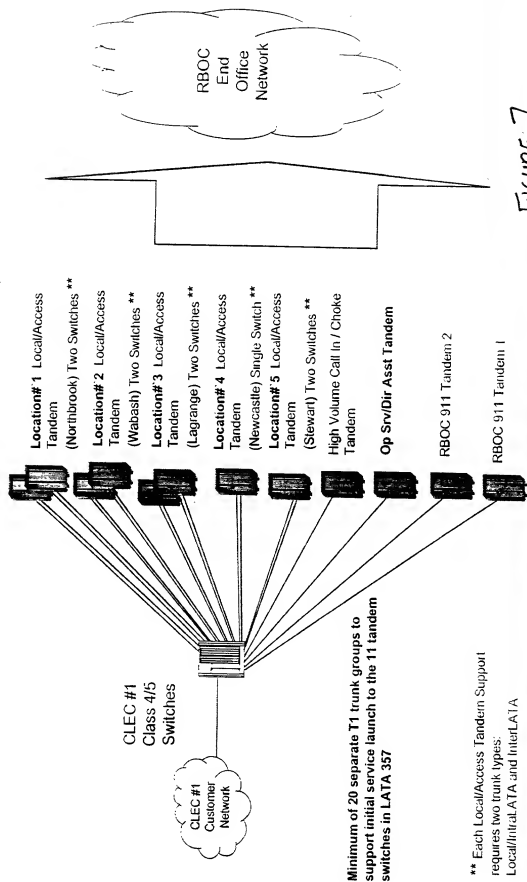


** Each Combined Local/Access Tandem Support requires two trunk types Local/Initial LATA and Initial ATA

FIGURE 6

PRIOR ART

Ameritech LATA 357 Tandem Trunk Group 5 Requirements

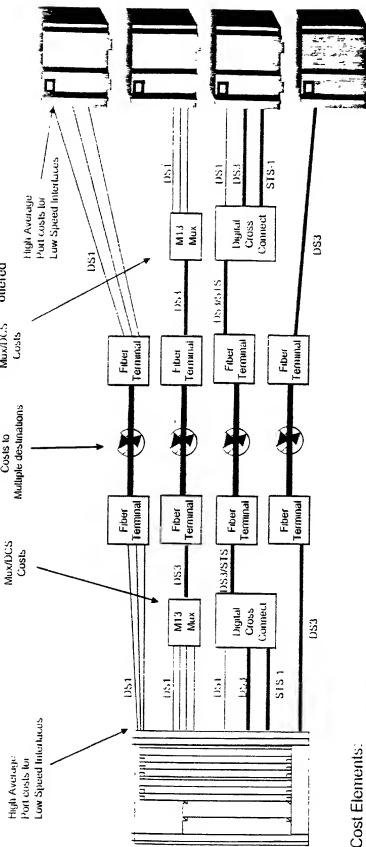


** Each Local/Access Tandem Support requires two trunk types: Local/Initial ATA and InterLATA

FIGURE 7

Prior Art

Port Costs Transporting to various Tandem Switches requires Trunk groups to be managed by Port Costs DS1, DS3, STS 1



Cost Elements:

- Port Costs DS1s are used for both the Carrier and the RBOC Tandem when call volume to the Tandem does not justify a DS3 and will not grow past a couple of TIs (e.g. E911, OPJDA, Choke)
- DS3s are the primary interface used for the Carrier when high volume Tandem traffic (local, Inland AIA, Inland AIA) is planned. However, M13 muxes or DCS systems are necessary at the RBOC Tandem CO to allow for managed growth of the Tandem switch ports to reduce the DS3s to TIs.
- Trunk groups are transported via owned, RBOC leased or third party leased fiber facilities.
- Complexity of Planning requires, additional P_{Tandem} , low fill rate of transport, multiple transport elements, network monitoring, provisioning

FIGURE 8

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Ameritech LATA 357 Tandem Trunking Requirements

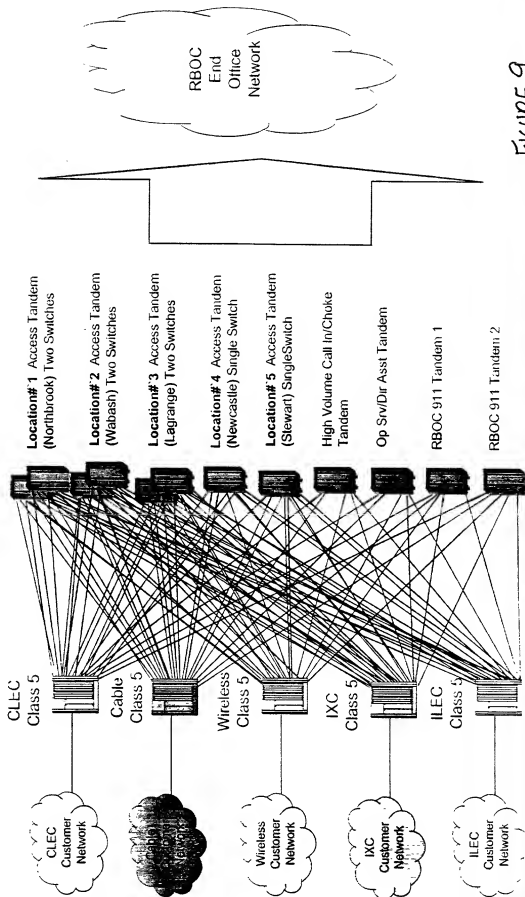


FIGURE 9

Prior Art

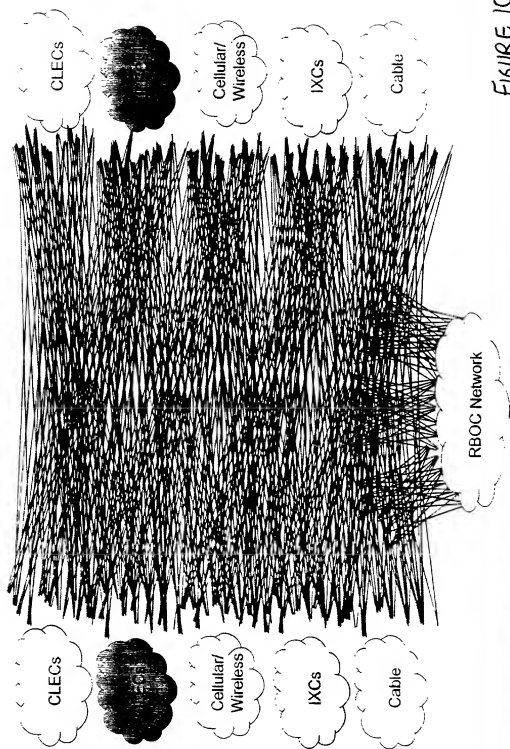


FIGURE 10

Prior Art

Ameritech LATA 357 Tandem Trunking Requirements

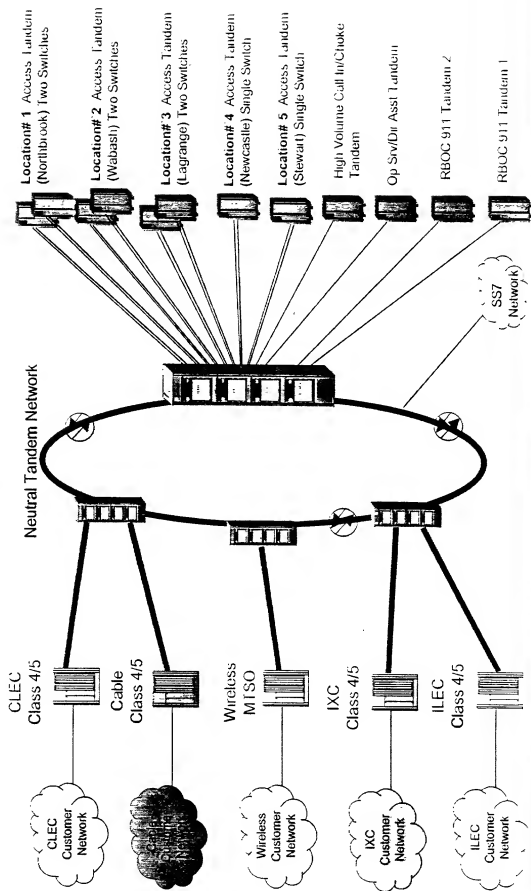
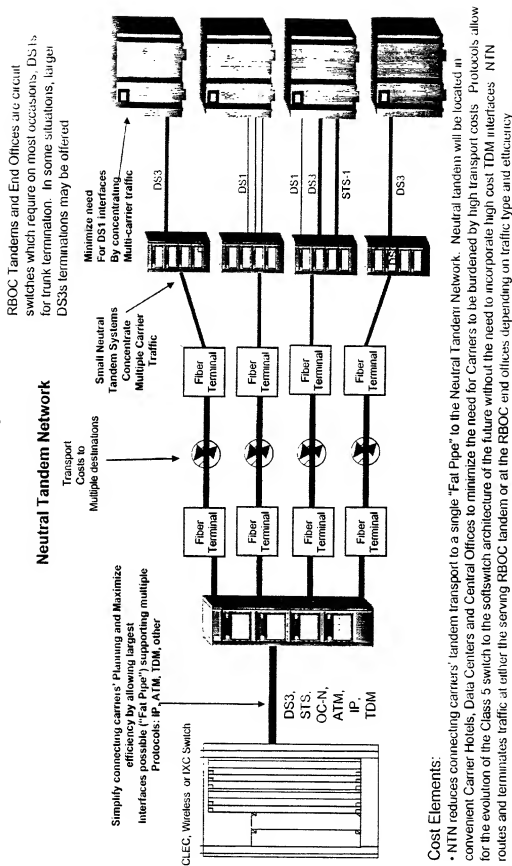


FIGURE 11



Cost Elements:

• NTN reduces connecting carriers' tandem transport to a single "Fat Pipe" to the Neutral Tandem Network. Neutral tandem will be located in convenient Carrier Hotels, Data Centers and Central Offices to minimize the need for Carriers to be burdened by high transport costs. Protocols allow for the evolution of the Class 5 switch to the softswitch architecture of the future without the need to incorporate high cost TDM interfaces. NTN routes and terminates traffic at either the serving RBOC tandem or at the RBOC end offices depending on traffic type and efficiency.

FIGURE 12

Ameritech LATA 357 Tandem Trunking Requirements

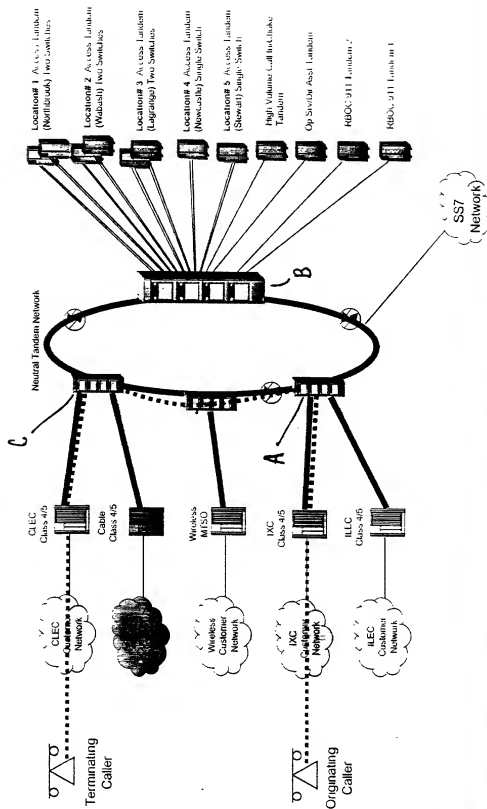


FIGURE 13

Ameritech LATA 357 Tandem Trunking Requirements

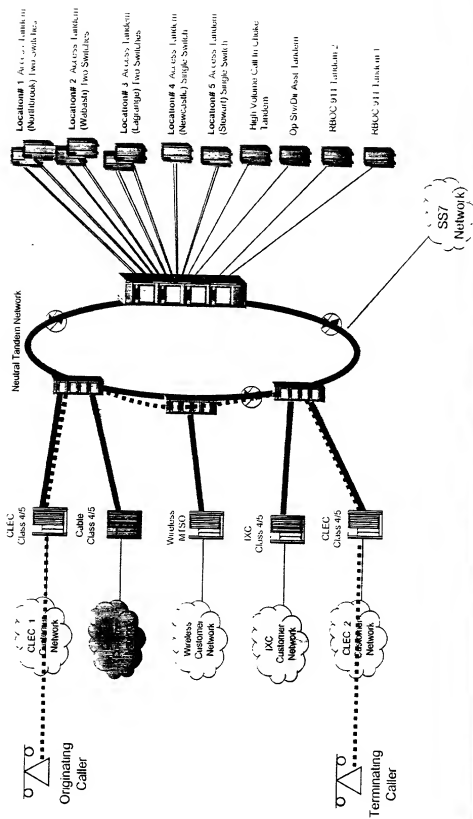


FIGURE 14

Ameritech LATA 357 Tandem Trunking Requirements

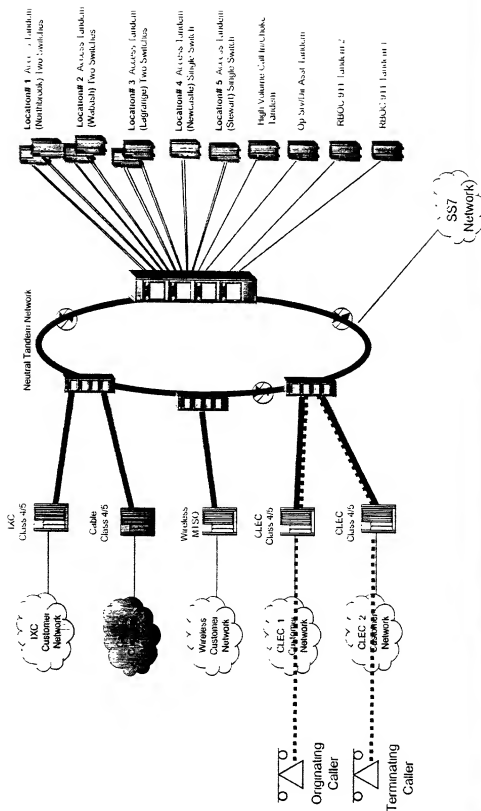


FIGURE 15

Ameritech LATA 357 Tandem Trunking Requirements

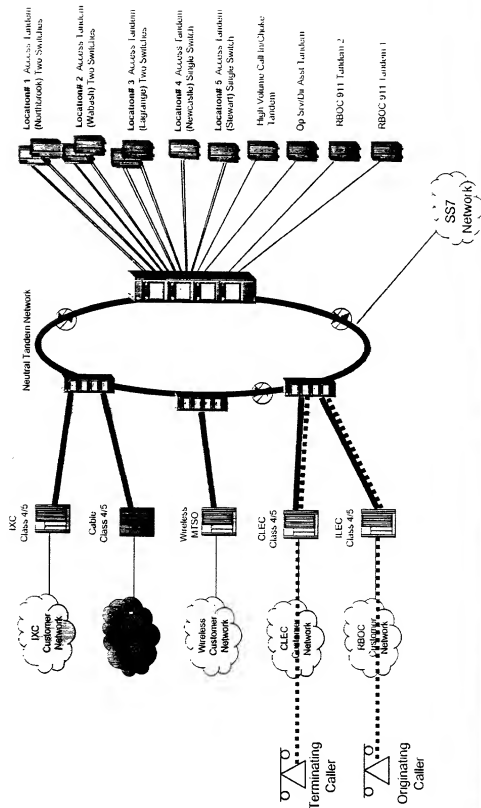


FIGURE 17

Ameritech LATA 357 Tandem Trunking Requirements

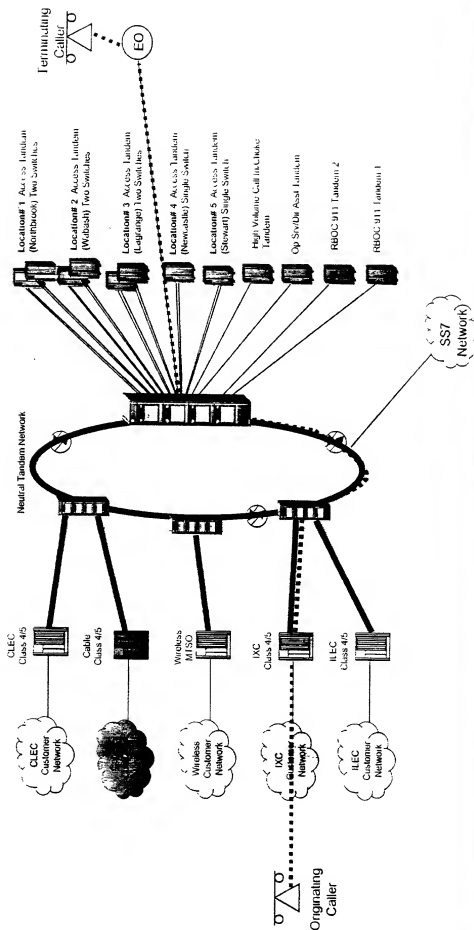
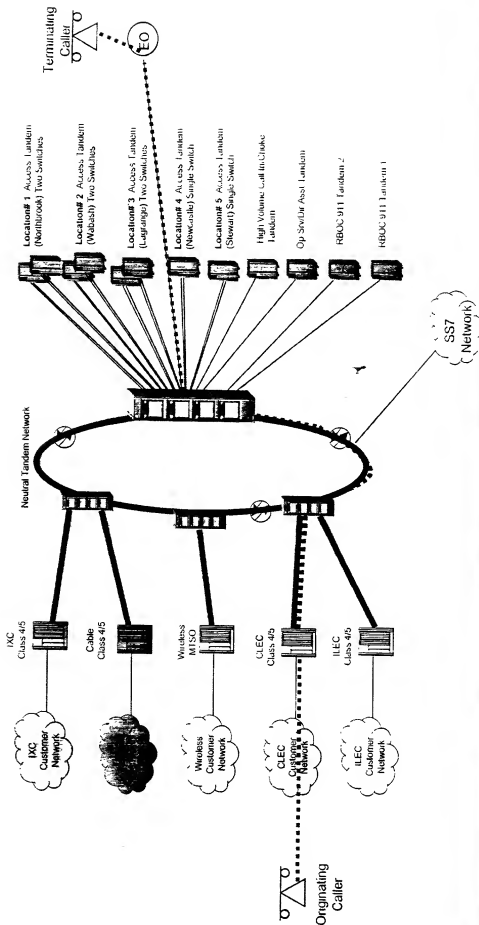


FIGURE 19

Ameritech LATA 357 Tandem Trunking Requirements



Ameritech LATA 357 Tandem Trunking Requirements

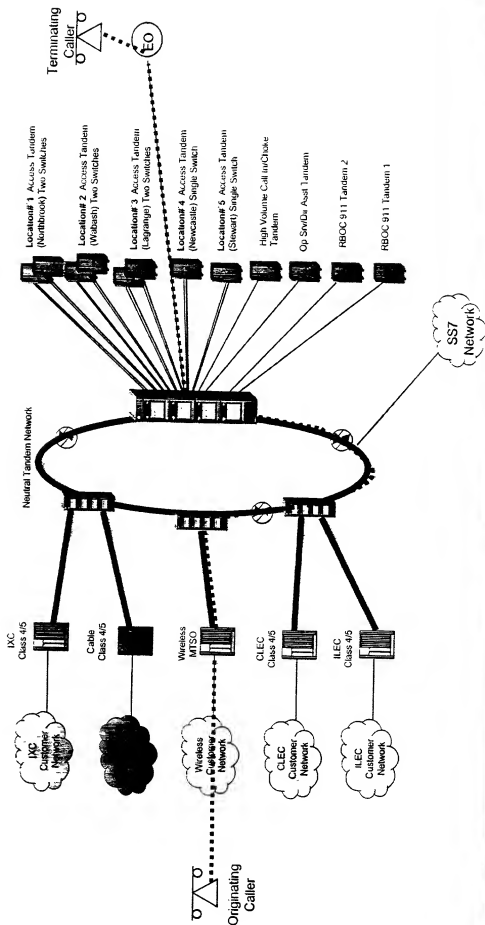


FIGURE 24

Ameritech LATA 357 Tandem Trunking Requirements

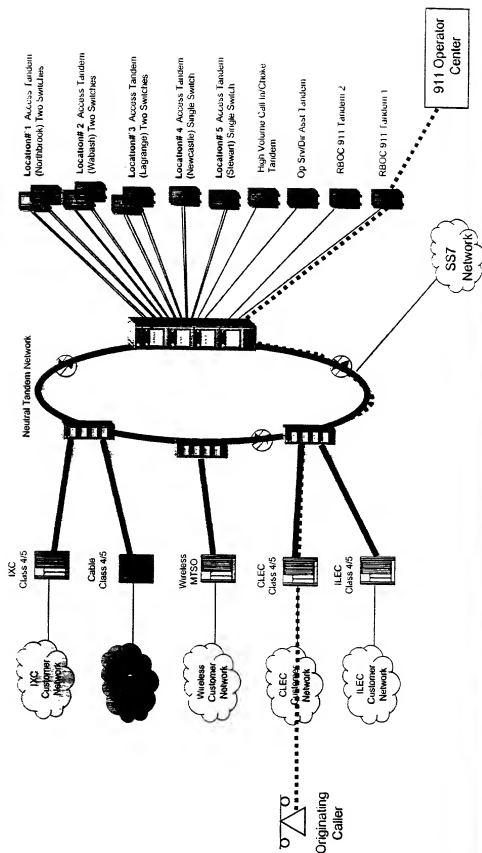


FIGURE 22

